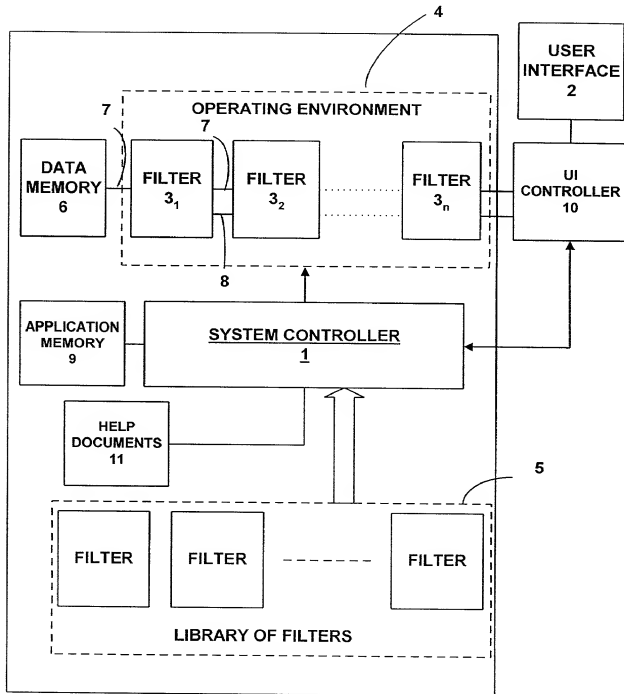


## BASIC ARCHITECTURE OF DESKTOP FILTER SYSTEM

Fig 1



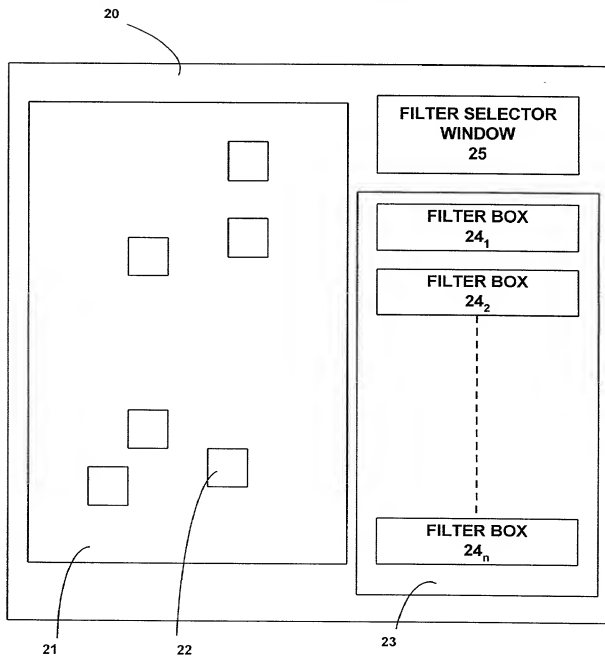
**Fig 2****DISPLAY SCREEN OF THE GRAPHICAL  
USER INTERFACE**

Fig 3

## DATABASE SEARCH VIA THE INTERNET

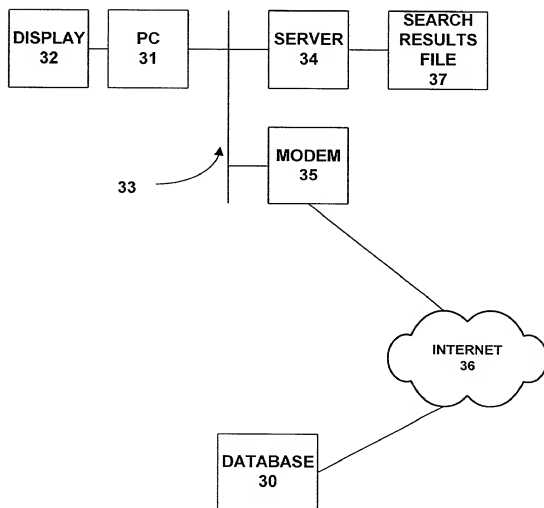


Fig 4

## FILTER SELECTOR WINDOW

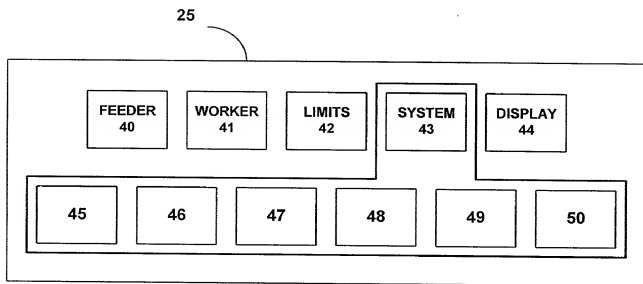


Fig 5

GRAPHICAL USER INTERFACE USED IN THE EXAMPLE OF PATENT  
DOCUMENT RETRIEVAL

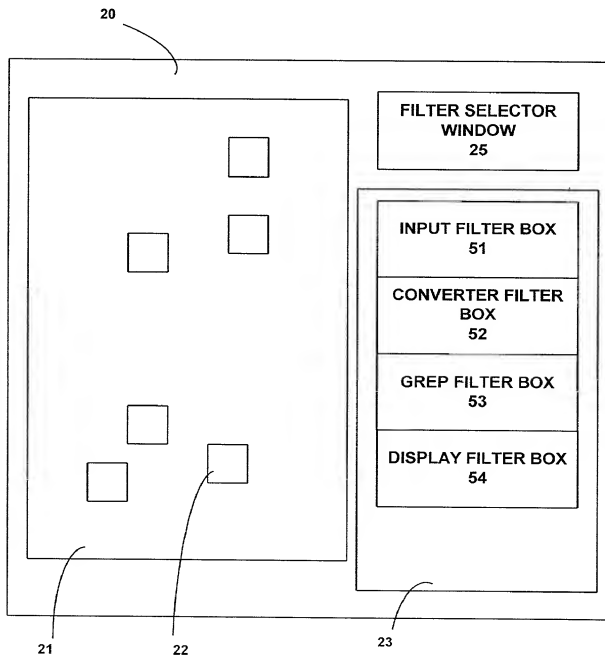


Fig 6

## FILTER SEQUENCE FOR DATABASE SEARCH RESULTS

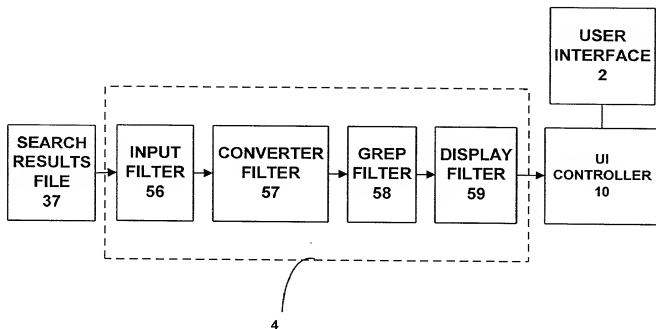


Fig 7A

GREP FILTER BOX SHOWING MENU

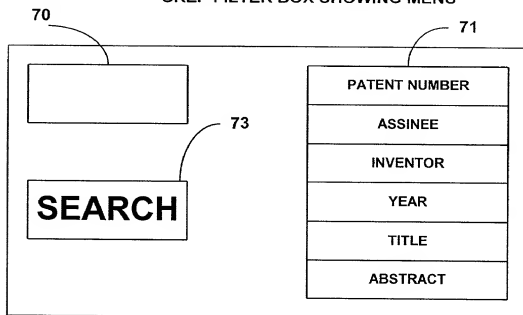
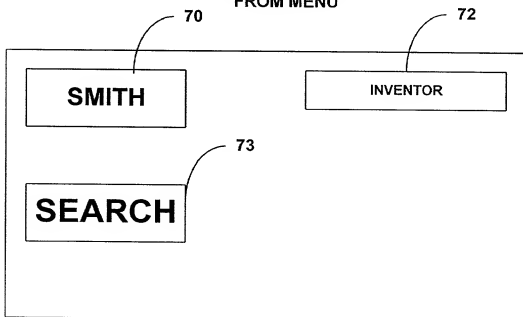


Fig 7B

GREP FILTER BOX AFTER SELECTION  
FROM MENU

## FILTER SEQUENCE FOR PROCESSING A COLLECTION OF DATA OBJECTS

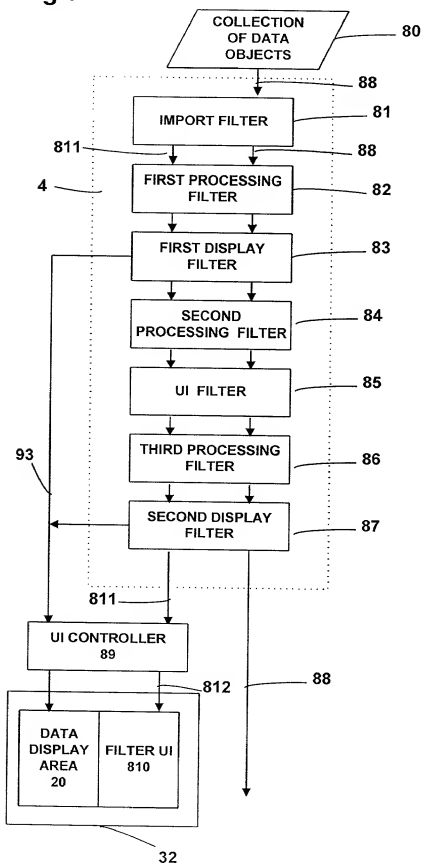




Fig 9

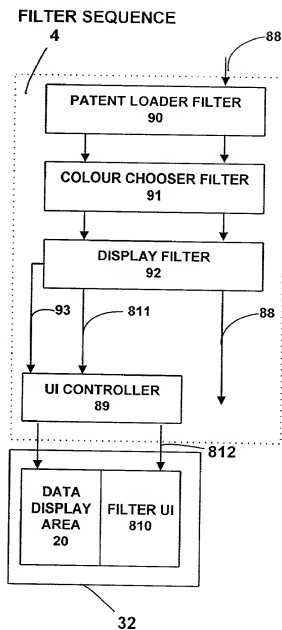


Fig 10

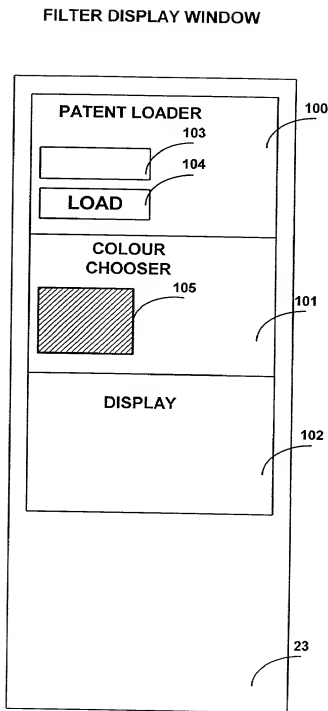


Fig 11

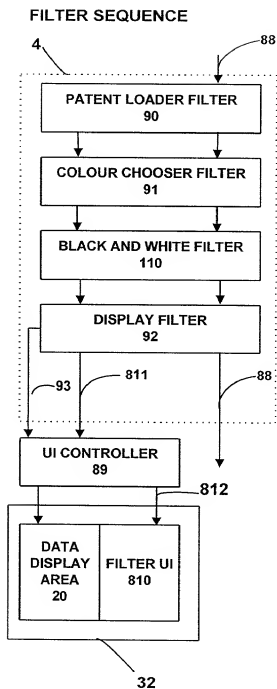


Fig 12

FILTER DISPLAY WINDOW

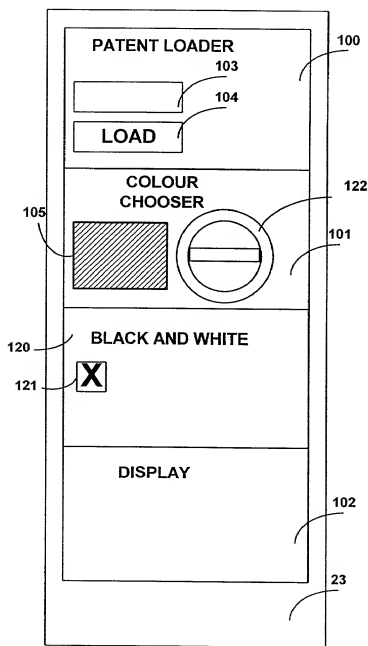


Fig 13

# FILTER SEQUENCE WITH TOOLBAR FILTER

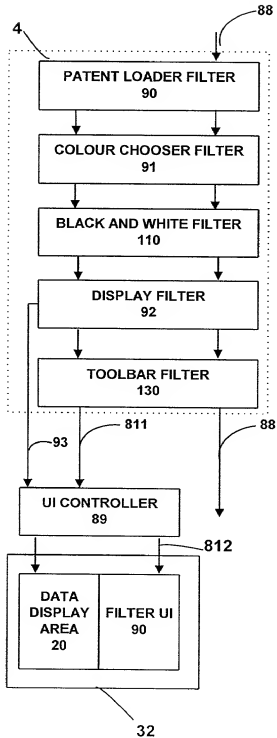
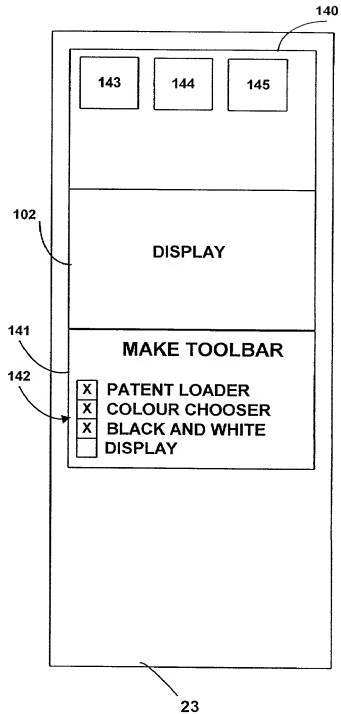


Fig 14

# FILTER DISPLAY WINDOW WITH TOOLBAR FILTER BOX



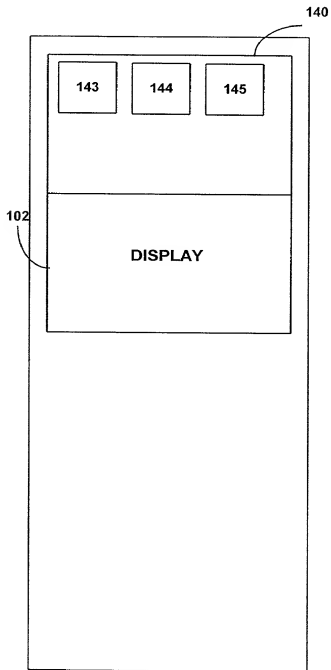
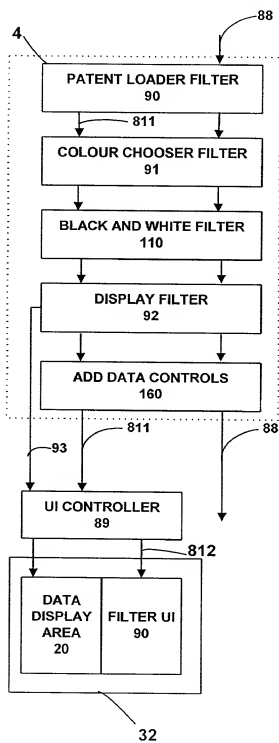
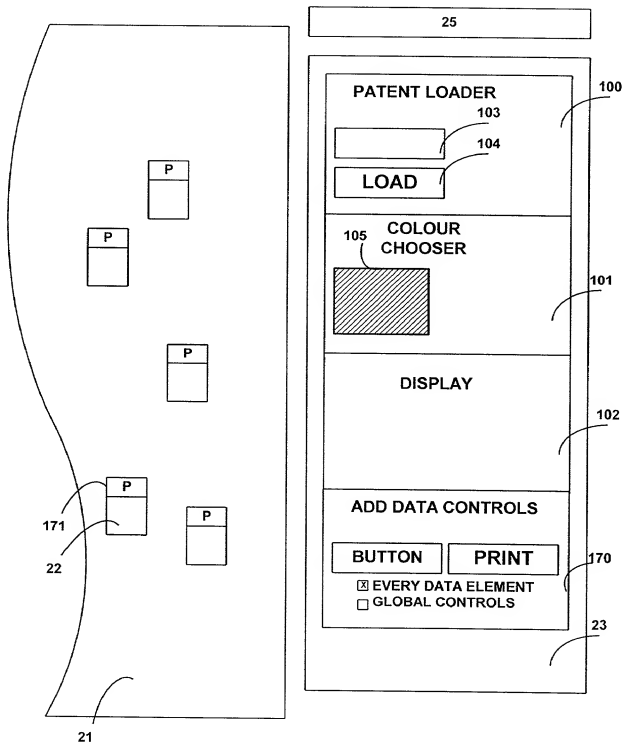
**Fig 15**FILTER DISPLAY WINDOW WITH TOOLBAR FILTER BOX  
HIDDEN

Fig 16

FILTER SEQUENCE WITH ADD -DATA-  
CONTROLS FILTER

**Fig 17**

**GUI FOR FILTER SEQUENCE INCLUDING  
ADD-DATA-CONTROLS FILTER**



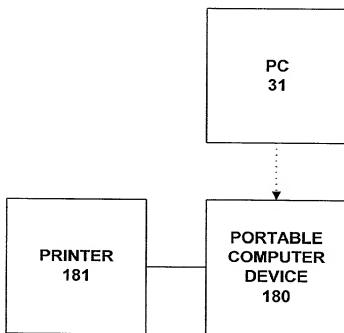
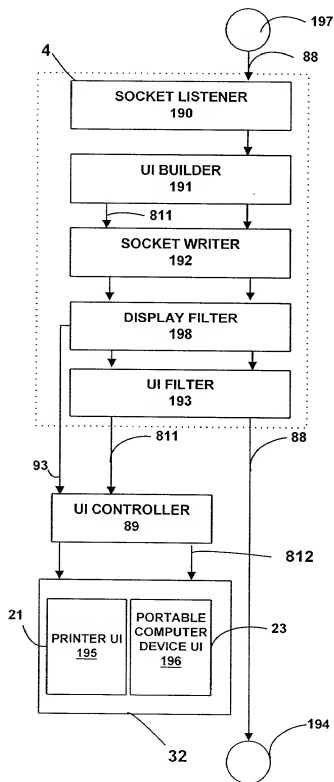
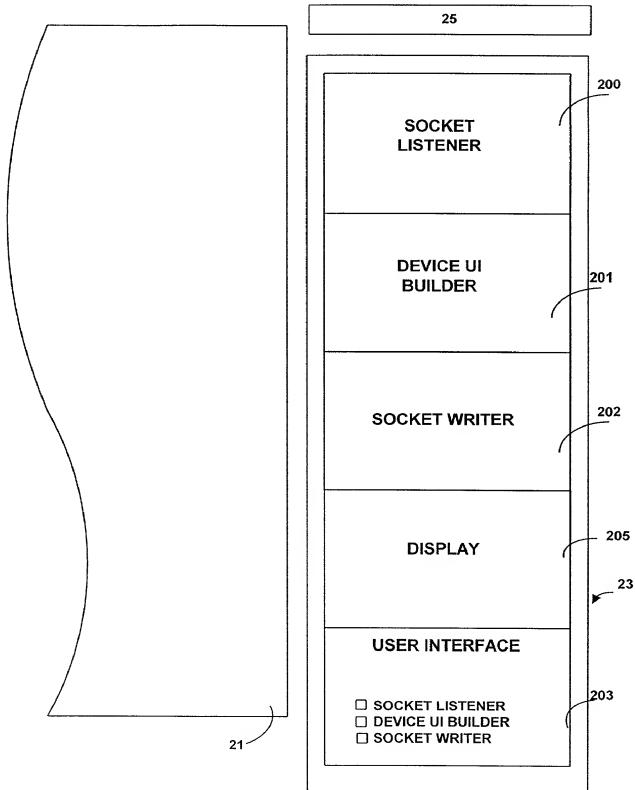
**Fig 18****APPLICATION DOWNLOADED TO PORTABLE COMPUTER DEVICE**

Fig 19

FILTER SEQUENCE FOR A PRINTER  
CONTROL APPLICATION



**Fig 20****DEVELOPING AN APPLICATION FOR A PRINTER  
USER INTERFACE**

210

PRINTER INFO:

STATUS: IDLE

TYPE: LASER PRINTER

LOCATION: FIRST FLOOR

DOCUMENT:

PAGES:

☐

TO

☐

COPIES:

☐

JOB INFO:

SORT:

☐

CLIP:

☐

LAYOUT:

PORTRAIT

PAPER:

A4

PRINT

## PRINTER USER INTERFACE FOR COLOUR PRINTER

220

**PRINTER INFO:**

STATUS: BUSY  
TYPE: COLOUR LASER  
LOCATION: FIRST FLOOR

**DOCUMENT:** [ ]

PAGES: [ ] TO [ ]

COPIES: [ ]

**JOB INFO:**

SORT: [ ]

CLIP: [ ]

LAYOUT: [ PORTRAIT ]

PAPER: [ A4 ]

COLOUR: [ ]

PROFILE: [ ICC ] [ PRINT ]

TRUE BLACK: [ ]

Fig 23

## USER INTERFACE FOR FACSIMILE MACHINE

The user interface is a vertical rectangular screen divided into three main sections. The top section is titled 'FAX INFO:' and displays 'STATUS: BUSY', 'TYPE: CANON', and 'LOCATION: GROUND FLOOR'. The middle section is titled 'DESTINATION NUMBER:' and contains a text input field, followed by 'NUMBER OF RETRIES:' with an adjacent checkbox. The bottom section is titled 'JOB INFO:' and contains 'PRINT REPORT:' with a checkbox, 'QUALITY:' with a dropdown menu showing 'HIGH', and a large 'SEND' button at the bottom. A reference numeral '230' with an arrow points to the right side of the interface frame.

**FAX INFO:**

STATUS: BUSY  
TYPE: CANON  
LOCATION: GROUND FLOOR

**DESTINATION NUMBER:**

NUMBER OF RETRIES: ☐

**JOB INFO:**

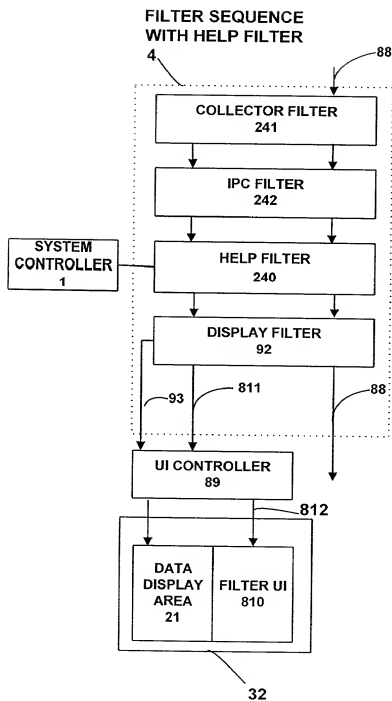
PRINT REPORT: ☐

QUALITY:

**SEND**

230

Fig 24



**Fig 25**

**FILTER DISPLAY WINDOW WITH  
HELP FILTER BOX**

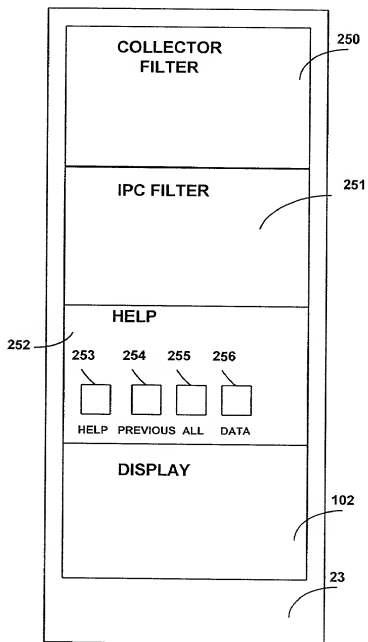


Fig 26

DATA DISPLAY WHEN 'HELP'  
BUTTON OR 'PREVIOUS' BUTTON  
SELECTED

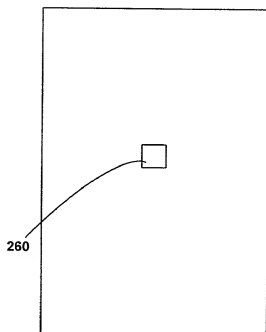
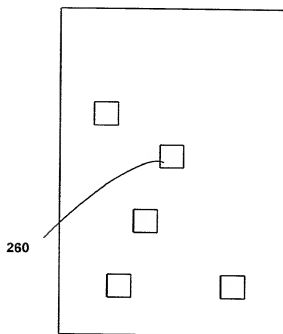


Fig 28

DATA DISPLAY WHEN 'ALL'  
BUTTON SELECTED



00985814-111301

## The IPC Filter

### Purpose

To pass through only those patent objects that have an IPC class conforming to the boolean expression input

### Applicability

Use on patent objects containing IPC metadata.

### Output

The patent objects satisfying the IPC expression.

### Details

The filter loads in a dataset containing the IPC hierarchy. Currently this is a complete list and is rather large - we may limit it in the future. A data structure is built that allows us to identify subclasses for any particular class.

A user can enter a simple boolean expression to query on. For example he can ask for "G06K+ AND NOT G06K 011/00" which means that he wants any patents that are in class G06K and any of its subclasses except for any patents that are in G06K 011/00 and any of those subclasses.

Other boolean operators available are : AND, OR, AND NOT, OR NOT.

The use of "\*" allows the user to match on any string.

### Example

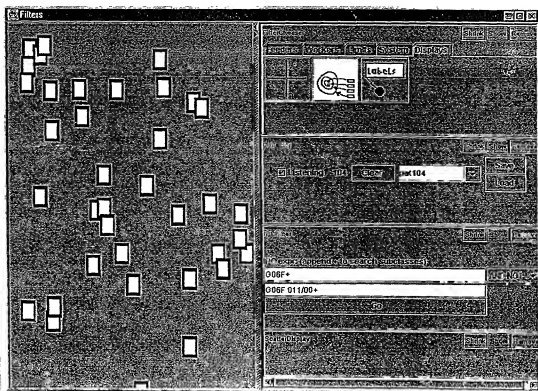




Fig 29

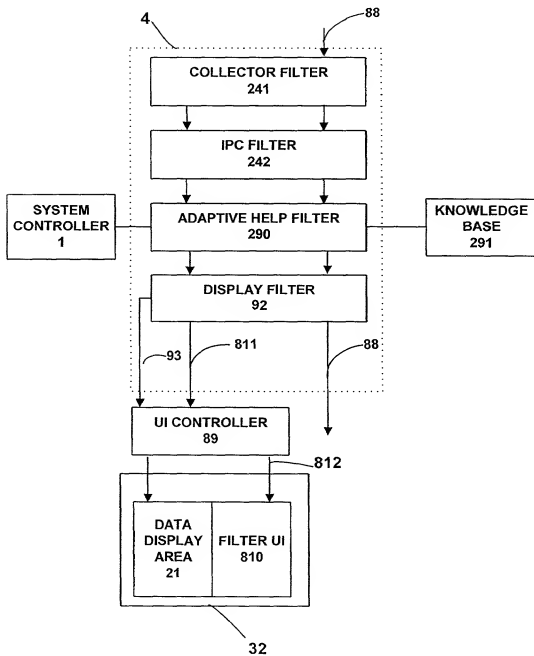
FILTER SEQUENCE INCLUDING ADAPTIVE  
HELP FILTER

Fig 30

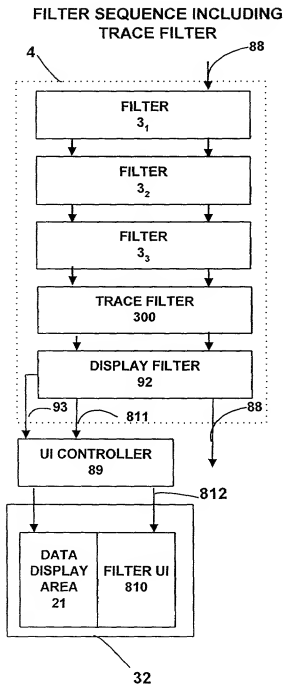


Fig 31

DATA DISPLAY OUTPUT OF TRACE  
FILTER

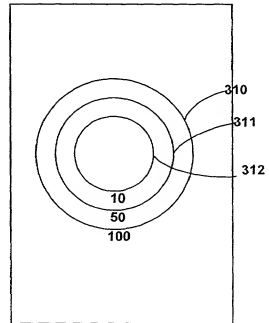


Fig 32

## BIDIRECTIONAL FILTERS

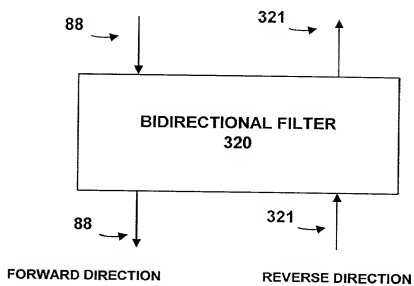


Fig 33

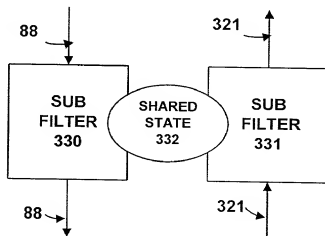


Fig 34

WORD PROCESSING APPLICATION  
FORMED FROM FILTER SEQUENCE  
INCLUDING BIDIRECTIONAL FILTERS

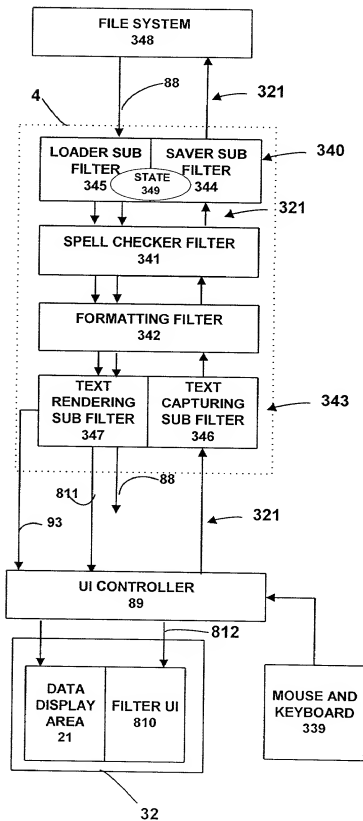
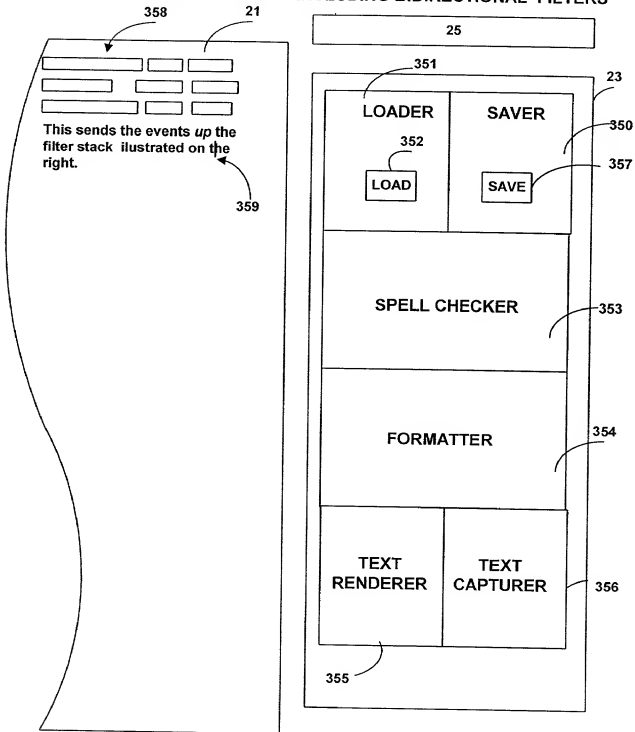


Fig 35

GUI FOR A WORD PROCESSING APPLICATION FORMED FROM  
FILTER SEQUENCE INCLUDING BIDIRECTIONAL FILTERS



0998914.11301

Fig 36

DIAGRAM EDITING APPLICATION FORMED FROM FILTER  
SEQUENCE INCLUDING BIDIRECTIONAL FILTERS

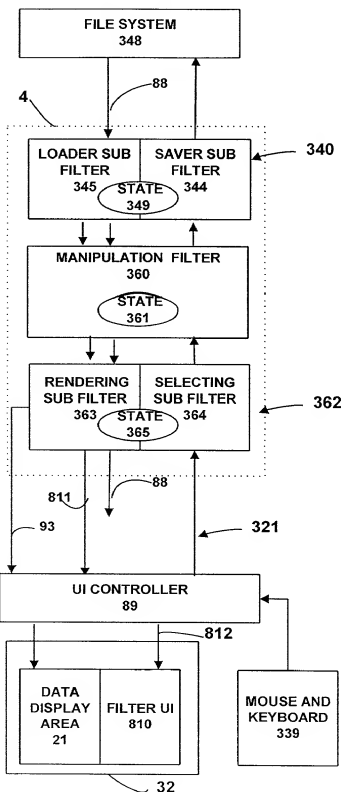
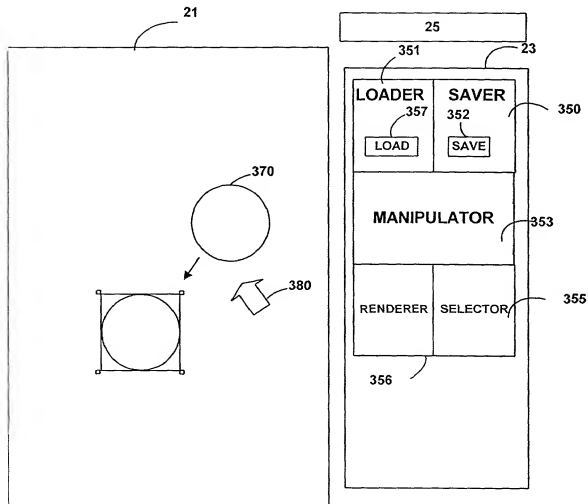


Fig 37

GUI FOR A DIAGRAM EDITING APPLICATION FORMED FROM  
FILTER SEQUENCE INCLUDING BIDIRECTIONAL FILTERS



09986344.11301  
10C11111298660

# DISPLAY AREA FOR A DIAGRAM EDITING OPERATION

Fig 38A

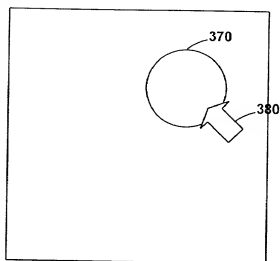


Fig 38B

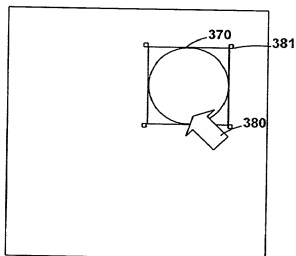


Fig 38C

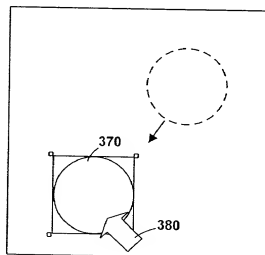




Fig 39

## DIAGRAM EDITING APPLICATION WITH UNDO FILTER

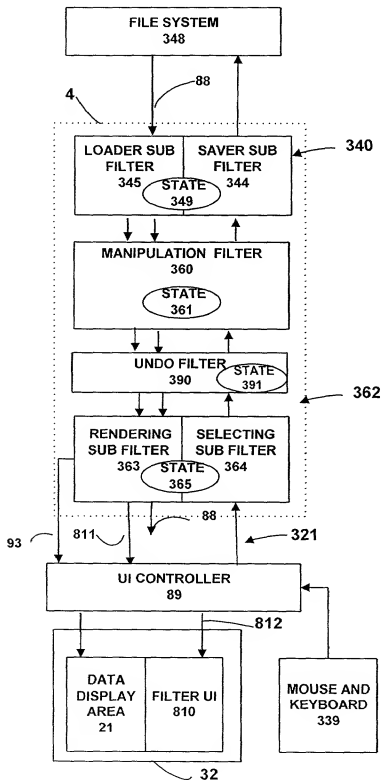


Fig 40

GUI FOR A DIAGRAM EDITING APPLICATION WITH UNDO FILTER

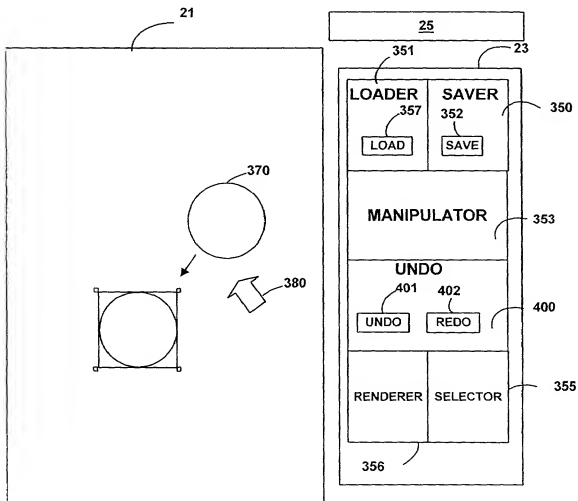


Fig 41

## OVERALL VIEW OF SYSTEM

